

UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Rainer Brachert
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Title: HOUSING FOR A HOUSEHOLD APPLIANCE

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Commissioner for Patents
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REPLY BRIEF

Pursuant to 37 CFR 41.41, Appellant hereby files a reply brief in response to the Examiner's Answer dated June 17, 2010, in the above-identified application, within the 2-month reply deadline.

Please charge Deposit Account No. 502786 for any deficiency or overpayment.

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(1) REAL PARTY IN INTEREST

The real party in interest is BSH Bosch und Siemens Hausgeräte GmbH.

(2) RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) STATUS OF CLAIMS

Claims 15-38 are pending in the present application. Claims 1-14 were canceled. Claims 24-28, 32, and 33 would be allowable if rewritten in independent form. The final rejections of claims 15-23, 29-31, and 34-38 are being appealed.

Claims 15, 29, and 35 are independent.

(4) STATUS OF AMENDMENTS

There are no outstanding Amendments.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

An exemplary embodiment of the present invention, as recited by, for example, independent claim 15, is directed to a housing for a household appliance, comprising a body (e.g., 1) (e.g., see paragraph [021]) and

at least one door (e.g., 2), which is connected to the body in a manner that enables it to swivel due to the provision of at least one first and one second multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [021]),

wherein the door (e.g., 2) is supported on an upper supporting surface (e.g., 21) of the first multiple-articulation hinge (e.g., 5, 6) and a lower supporting surface (e.g., 22) of the second multiple-articulation hinge (e.g., 5, 6) by means of at least one shim (e.g., 23) inserted between the door (e.g., 2) and at least one of the supporting surfaces (e.g., 21, 22) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

In conventional built-in refrigeration devices, the door that is fitted to the appliance at the manufacturer can be concealed in the built-in appliance behind a furniture panel which swivels when opening and closing the door. In order to deliver an aesthetically satisfactory appearance, the edges of this furniture panel must be aligned exactly to those of adjacent cabinet doors. For this purpose, the furniture panel and the door of the refrigeration device are displaceably coupled to one another so that the furniture panel can be aligned to neighboring cabinet doors. In this case, precise adjustability of the refrigeration device door is not necessary, since the furniture panel can be adjusted with respect to the door. This is similar to the device of the Lanzani reference, which is applied by the Office Action in the rejections below.

In contrast, other conventional built-in household appliances include a body and a door, in which the door that is supplied by the appliance manufacturer is provided to remain visible and uncovered in the built-in position of the refrigeration device. At least one door must be adjustable with respect to the body to align its edges so that they are flush with those of another door. In this case, the door of the appliance needs to be adjustable in relation to the body, which is in stark contrast to the previously described conventional device and the device disclosed in the applied Lanzani reference in which the furniture panel is adjustable with respect to the door.

In providing adjustability between the door and the body, the door can be attached to the body of the appliance using multiple-articulation hinges to prevent a side of the door close to the hinge from hitting against an adjacent wall of the furniture compartment. However, if the fixing points of these hinges are not exactly matched to one another on the body and on the door of the appliance, the arrangement of body, hinges and door can be exposed to internal stresses causing the axes of the hinges to be deflected from an exactly parallel orientation, thereby causing a processional movement during opening and closing of the door, and ultimately shortening the lifetime of the hinges.

In stark contrast to these conventional devices, the present invention provides multiple-articulation hinges coupling the door to the body in a manner that enables the door to swivel, wherein the door is supported with an upper supporting surface of the first multiple-articulation hinge and a lower supporting surface of the second multiple-articulation hinge, and at least one shim removably inserted between the door and one of the supporting surfaces permitting the door to be adjusted in a vertical direction with respect to the body.

In this manner, the present invention provides a housing for a cabinet-like household appliance having multiple-articulation hinges that allow the user to vertically align the door position with respect to the body simply and without the risk of strain which wears down the multiple-articulation hinges. Other exemplary embodiments also allow the user to align the door position with respect to the body in a horizontal direction as well as in forward and backward directions with respect to the face of the door in a simple manner and without the risk of strain on the multiple-articulation hinges. See, e.g., paragraphs [005]-[006].

Claim 16 depends from claim 15 and recites wherein a plurality of shims (e.g., 23) is inserted between the supporting surfaces (e.g., 21, 22) and the door (e.g., 2) (e.g., see paragraph [026], [027], [030]).

Claim 17 depends from claim 15 and recites wherein the supporting surfaces (e.g., 21, 22) are arranged on a support element (e.g., 2) which is disposed on a hinge arm of the first

multiple-articulation hinge (e.g., 5, 6) and second multiple-articulation hinge (e.g., 5, 6) which is coupled to the door (e.g., 2) (e.g., see paragraph [026], [027], [030]).

Claim 18 depends from claim 15 and recites wherein the shims (e.g., 23) have a rectangular basic outline and are made of a plastic injection molding (e.g., see paragraph [026]).

Claim 19 depends from claim 15 and recites wherein a heat-insulating body of the door (e.g., 2) is arranged between the supporting surfaces (e.g., 21, 22) of the multiple-articulation hinges (e.g., 5, 6) and the multiple-articulation hinges (e.g., 5, 6) are concealed behind edge sections of the door (e.g., 2) projecting over the body (e.g., 1) (e.g., see paragraph [007], [008]).

Claim 20 depends from claim 15 and recites wherein an outer wall of the door (e.g., 2) is formed by a glass pane (e.g., 7) (e.g., see paragraph [022]).

Claim 21 depends from claim 15 and recites wherein the supporting surface is connected to the door (e.g., 2) by means of at least one screw (e.g., 24, 34) on at least one of the multiple-articulation hinges (e.g., 5, 6) (e.g., see paragraph [026], [030]-[032]).

Claim 22 depends from claim 21 and recites wherein the screw (e.g., 24) extends through an oblong hole (e.g., 25) of the supporting surface (e.g., 21, 22) (e.g., see paragraph [028], [031]).

Claim 23 depends from claim 22 and recites wherein the oblong hole (e.g., 25) is aligned parallel to the door (e.g., 2) (e.g., see paragraph [028]).

An exemplary embodiment of the present invention, as recited by, for example, independent claim 29, is directed to a refrigerator comprising:

a housing including a body (e.g., 1) and a door (e.g., 2) (e.g., see paragraph [021]);

first and second multiple-articulation hinges (e.g., 5, 6) coupling the door (e.g., 2) to the body (e.g., 1) in a manner that enables the door (e.g., 2) to swivel, wherein the door (e.g., 2) is supported with an upper supporting surface (e.g., 21) of the first multiple-

articulation hinge (e.g., 5, 6) and a lower supporting surface (e.g., 22) of the second multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3); and

at least one shim (e.g., 23) removably inserted between the door (e.g., 2) and one of the supporting surfaces (e.g., 21, 22) permitting the door (e.g., 2) to be adjusted in a vertical direction with respect to the body (e.g., 1) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 30 depends from claim 29 and recites a plurality of shims removably inserted between the supporting surfaces (e.g., 21, 22) and the door (e.g., 2), the position of the door (e.g., 2) with respect to the body (e.g., 1) being adjustable in a vertical direction in response to the number of shims disposed between the supporting surfaces (e.g., 21, 22) and the door (e.g., 2) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 31 depends from claim 29 and recites a mounting bracket coupled between the first multiple-articulation hinge (e.g., 5, 6) and the door (e.g., 2) and permitting the door (e.g., 2) to be adjusted in a horizontal direction with respect to the body (e.g., 1) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 34 depends from claim 15 and recites wherein the at least one shim inserted between the door (e.g., 2) and the at least one of the supporting surfaces (e.g., 21, 22) causes the door (e.g., 2) to be adjusted in a vertical direction with respect to the body (e.g., 1) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

An exemplary embodiment of the present invention, as recited by, for example, independent claim 35, is directed to a housing for a household appliance, comprising:

a body (e.g., 1) (e.g., see paragraph [021]);

at least one door (e.g., 2) coupled to the body (e.g., 1) in a manner that enables the at least one door (e.g., 2) to swivel with respect to the body (e.g., 1), the at least one door (e.g., 2) being vertically adjustable with respect to the body (e.g., 1) (e.g., see paragraph [021]);

at least one first multiple-articulation hinge (e.g., 5, 6), wherein a lower end of the door (e.g., 2) is supported on an upper supporting surface (e.g., 21) of the first multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3);

at least one second multiple-articulation hinge (e.g., 5, 6), wherein an upper end of the door (e.g., 2) is supported by a lower supporting surface of the second multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3);
and

at least one shim (e.g., 23) between the lower end of the door (e.g., 2) and the upper supporting surface of the first multiple-articulation hinge (e.g., 5, 6), and the upper end of the door (e.g., 2) and the lower supporting surface of the second multiple-articulation hinge (e.g., 5, 6), the at least one shim (e.g., 23) vertically adjusting a position of the door (e.g., 2) with respect to the body (e.g., 1) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 36 depends from claim 35 and recites wherein the at least one shim includes a plurality of shims (e.g., 23) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3),

wherein at least one first shim of the plurality of shims (e.g., 23) is between the lower end of the door (e.g., 2) and the upper supporting surface (e.g., 21) of the first multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3),
and

wherein at least one second shim of the plurality of shims (e.g., 23) is between the upper end of the door (e.g., 2) and the lower supporting surface (e.g., 22) of the second multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 37 depends from claim 36 and recites wherein the plurality of shims (e.g., 5, 6) includes a predetermined total number of shims between the lower end of the door (e.g., 2) and the upper supporting surface (e.g., 21) of the first multiple-articulation hinge (e.g., 5, 6), and the upper end of the door (e.g., 2) and the lower supporting surface (e.g., 22) of the

second multiple-articulation hinge (e.g., 5, 6) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

Claim 38 depends from claim 37 and recites wherein a number of the at least one first shim of the plurality of shims (e.g., 23) is different than a number of the at least one second shim of the plurality of shims (e.g., 23) (e.g., see paragraph [022], [026], [027]; see also Figures 1-3).

As explained above, these features are important for providing a housing for a cabinet-like household appliance having multiple-articulation hinges that allow the user to vertically align the door position with respect to the body simply and without the risk of strain which wears down the multiple-articulation hinges. Other exemplary embodiments, as recited in the dependent claims, also allow the user to align the door position with respect to the body in a horizontal direction as well as in forward and backward directions with respect to the face of the door in a simple manner and without the risk of strain on the multiple-articulation hinges.

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- a. Whether claims 15-19, 21-23, 29-31, and 34-36 are unpatentable under 35 U.S.C. 103(a) over the Lanzani reference (US 5,471,709) in view of the Mansfeld reference (GB 708,367).
- b. Whether claim 20 is unpatentable under 35 U.S.C. 103(a) over the Lanzani reference and the Mansfeld reference, in view of the Richardson et al. reference (US 5,113,628).
- c. Whether claims 37 and 38 are unpatentable under 35 U.S.C. 103(a) over the Lanzani reference and the Mansfeld reference, in view of the Horgan, Jr. reference (US patent 3,555,733).

(7) ARGUMENT

- a. Claims 15-19, 21-23, 29-31, and 34-36 are NOT unpatentable under 35 U.S.C. 103(a) over the Lanzani reference (US 5,471,709) in view of the Mansfeld reference (GB 708,367).

Claims 15-19, 21-23, 29-31, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Lanzani reference (US 5,471,709) in view of the Mansfeld reference (GB 708,367).

Appellant respectfully traverses this rejection.

Appellant respectfully submits that none of the applied references discloses or suggests the features of the claimed invention including a housing for a cabinet-like household appliance, comprising a body and at least one door, which is connected to the body in a manner that enables it to swivel due to the provision of at least one first and one second multiple-articulation hinge, wherein the door is supported on an upper supporting surface of the first multiple-articulation hinge and a lower supporting surface of the second multiple-articulation hinge by means of at least one shim inserted between the door and at least one of the supporting surfaces, as recited in claim 15.

Somewhat similarly, none of the applied references discloses or suggests the features of the claimed invention including a refrigerator comprising a housing including a body and a door, first and second multiple-articulation hinges coupling the door to the body in a manner that enables the door to swivel, wherein the door is supported with an upper supporting surface of the first multiple-articulation hinge and a lower supporting surface of the second multiple-articulation hinge, and at least one shim removably inserted between the door and one of the supporting surfaces permitting the door to be adjusted in a vertical direction with respect to the body, as recited in claim 29.

Also, none of the applied references discloses or suggests the features of the claimed invention including a housing for a household appliance, comprising a body; at least one door coupled to the body in a manner that enables the at least one door to swivel with respect to the body, the at least one door being vertically adjustable with respect to the body; at least one first multiple-articulation hinge, wherein a lower end of the door is supported on an upper supporting surface of the first multiple-articulation hinge; at least one second multiple-articulation hinge, wherein an upper end of the door is supported by a lower supporting surface of the second multiple-articulation hinge; and at least one shim between the lower end of the door and the upper supporting surface of the first multiple-articulation hinge, and the upper end of the door and the lower supporting surface of the second multiple-articulation hinge, the at least one shim vertically adjusting a position of the door with respect to the body, as recited in claim 35.

As explained above, these features are important for providing a housing for a cabinet-like household appliance having multiple-articulation hinges that allow the user to vertically align the door position with respect to the body simply and without the risk of strain which wears down the multiple-articulation hinges. Other exemplary embodiments, as recited in the dependent claims, also allow the user to align the door position with respect to the body in a horizontal direction as well as in forward and backward directions with respect to the face of the door in a simple manner and without the risk of strain on the multiple-articulation hinges.

The Lanzani reference very clearly does not teach or suggest these features. Indeed, the Lanzani reference has absolutely nothing to do with adjusting the door with respect to the body of the appliance.

Instead, as clearly shown in Figures 1-3, the Lanzani reference relates to a hinge that adjusts the position of the facing panel (7) with respect to the door 6, not the door (6) with respect to the body (4). The Lanzani reference clearly states that the hinge permits rapid and simple adjustment of the position of the panel with respect to the refrigerator door when the panel is attached to the door. See, e.g., col. 2, lines 21-24.

As clearly shown in Figures 1 and 2, the Lanzani reference does not provide any adjustability between the door (6) or supporting member (2) and the front (3) of the refrigerator body (4). See, e.g., col. 2, lines 55-62.

Thus, the Lanzani reference has absolutely nothing to do with adjusting the door (6) with respect to the body (4) of the refrigerator, as claimed.

In the Response to Arguments, the final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, take the position that the front panel (7) is considered to be part of the door (6), and therefore, when an adjustment is made to the position of the front panel (7) or the position of the door (6), the position of the door with respect to the body (4) is changing.

Appellant respectfully submits that this simply is not the case. An adjustment made to the position of the front panel (7) (which the Office Action considers to be part of the door 6) has no affect on the position of the overall door (6) with respect to the body (4). Thus, irrespective of whether the front panel (7) is considered to be part of the door (6), the adjustment of the front panel (7) with respect to the door (6) has absolutely nothing to do with adjusting the part of the door (6) with respect to the body (4) of the refrigerator, and hence, absolutely nothing to do with the problems being addressed by the claimed invention.

Indeed, as explained above, in conventional built-in refrigeration devices such as the device of the Lanzani reference, the door that is fitted to the appliance at the manufacturer is concealed in the built-in appliance behind a furniture panel (7) which swivels when opening and closing the door (6). In order to deliver an aesthetically satisfactory appearance, the edges of this furniture panel (7) must be aligned exactly to those of adjacent cabinet doors. For this purpose, the furniture panel (7) and the door (6) of the refrigeration device are displaceably coupled to one another so that the furniture panel (7) can be aligned to neighboring cabinet doors. In this case, precise adjustability of the refrigeration device door (6) is not necessary, since the furniture panel (7) can be adjusted with respect to the door (6).

In stark contrast, the present invention provides a housing in which the door of the appliance is adjustable in relation to the body. Again, this is in stark contrast to the device disclosed in the Lanzani reference in which the furniture panel (7) is adjustable with respect to the door (6), and precise adjustability of the refrigeration device door (6) is NOT necessary, since the furniture panel (7) can be adjusted with respect to the door (6).

Appellant submits that one of ordinary skill in the art clearly would not have been motivated to modify the Lanzani reference in view of the Mansfeld reference, and the Office Action clearly fails to establish a rational underpinning to support the legal conclusion of obviousness.

The Office Action acknowledges that the Lanzani reference does not disclose using a shim to space the door from the hinge. The final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, assert that the Mansfeld reference teaches at least one shim inserted (11) between the door and at least one of the supporting surfaces, and therefore, takes the position that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the hinges of Lanzani to include shims as taught by Mansfeld, since it would have allowed for vertical adjustment of the door.

The Response to Arguments of the final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, each assert that "adding a different means for vertically adjusting the door would have allowed for the door to be installed at approximately the desired height using the shims of Mansfeld and then the door could have been precisely adjusted without having to remove the door from the hinges." The final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, take the position that inserting a plurality of shims between the supporting surfaces of the upper and lower hinges and the door would provide for a change in the vertical position of the door relative to the body. The final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, assert that the horizontal adjustment as pointed out by the Appellant would be made if the plurality of shims were inserted between the door and the front panel.

In the Amendment filed on October 14, 2009, Appellant noted that the Office Action dated July 20, 2009, failed to explain or establish how a plurality of shims could be inserted between the supporting surfaces of the upper and lower hinges and the door of the Lanzani reference in order to adjust the door in a vertical direction. The Response to Arguments of the final Office Action dated December 16, 2009, and the Examiner's Answer dated June 17, 2010, further explains the alleged location where the shim would be inserted between supporting surfaces of the hinges and the door to provide for vertical adjustability by providing the annotated Figure 3.

Even assuming in arguendo that the Lanzani reference could be modified as alleged, Appellant respectfully submits that one of ordinary skill in the art would have absolutely no reason to make such a modification to the device of the Lanzani reference.

As explained above, in the device disclosed in the Lanzani reference the furniture panel (7) is adjustable with respect to the door (6), and precise adjustability of the refrigeration device door (6) is NOT necessary, since the furniture panel (7) can be adjusted with respect to the door (6).

Moreover, if the Lanzani reference is considered to teach adjusting the panel 7 (which the Office Action considers to be part of the door 6) in order to align the alleged door assembly 6, 7 with the body 4, then one of ordinary skill in the art would have absolutely no reason to modify the device of the Lanzani reference to arrive at the claimed invention because the alleged door assembly 6, 7 would already allow for vertical adjustment of the door 6, 7 with respect to the body 4. Hence, based on the articulated reasoning set forth in the Office Action, the precise adjustability of the refrigeration device door part 6 with respect to the body 4 clearly would NOT be necessary in the Lanzani reference, since the furniture panel 7 of the door assembly 6, 7 can be adjusted to allow for vertical adjustment of the door assembly 6, 7 with respect to the body 4.

Since the alleged door assembly 6, 7 would already allow for vertical adjustment of the door 6, 7 with respect to the body 4, the addition of the shims would result in additional

parts, and hence additional cost, simply to provide a duplicate function. One of ordinary skill in the art clearly would not have been motivated to add to the cost and complexity of the assembly without providing any further benefits or solving any other problems from the existing design.

For at least these reasons, Appellant submits that one of ordinary skill in the art clearly would not have been motivated to modify the Lanzani reference in view of the Mansfeld reference.

In stark contrast, the claimed invention provides at least one shim removably inserted between the door and one of the supporting surfaces permitting the door to be adjusted in a vertical direction with respect to the body, as recited for example in claim 29.

As explained above, these features are important for providing a housing for a cabinet-like household appliance having multiple-articulation hinges that allow the user to vertically align the door position with respect to the body simply and without the risk of strain which wears down the multiple-articulation hinges. Other exemplary embodiments, as recited in the dependent claims, also allow the user to align the door position with respect to the body in a horizontal direction as well as in forward and backward directions with respect to the face of the door in a simple manner and without the risk of strain on the multiple-articulation hinges.

The Advisory Action dated March 30, 2010

The Advisory Action dated March 30, 2010, asserts that Applicants' argument stating precise adjustability of the refrigeration device door (6) is not necessary, since the furniture panel (7) can be adjusted with respect to the door is not persuasive. The Advisory Action asserts that allowing the vertical position of the door (6) to be adjusted by the shims of Mansfeld allows for the door to be installed at the anticipated correct vertical position. After the refrigeration device is installed at its final destination the door would already be located at the anticipated correct vertical position and a final precise adjustment to the furniture panel could then be made. The Advisory Action asserts that the alleged modification allows for a

wider tolerance range when aligning the furniture panel of the door with its surrounding environment.

Contrary to the assertions in the Advisory Action, Appellant respectfully submits that one of ordinary skill in the art would not have had any apparent reason to modify the Lanzani reference in view of the Mansfeld reference in the manner alleged.

First, Appellant respectfully submits that the door commonly is installed at the final destination, not prior to shipping and installation at the final destination. As explained above, Appellant respectfully submits that since the alleged door assembly (6, 7) would already allow for vertical adjustment of the panel (7) with respect to the door (6) at the final destination, the additional modification of the Lanzani reference to add shims to provide adjustability of the vertical position of the door (6) based on the assertions in the Advisory Action would result in additional parts, and hence additional cost, without providing any additional benefit. One of ordinary skill in the art clearly would not have been motivated to add to the cost and complexity of the assembly without providing any further benefits or solving any other problems from the existing design.

Moreover, Appellant respectfully submits that the adjustment of the door with respect to the body is used in appliances in which the door is visible to the user simply to align the edge so that they are flush with one another. However, these additional features still would not alleviate the need to adjust the furniture panel (7) with respect to the door (6). Hence, Appellant respectfully submits that one of ordinary skill in the art would not have been motivated to add an adjustment feature that correspondingly would add to the cost and complexity of the assembly while failing to provide any benefit, since the alleged door assembly (6, 7) would already allow for vertical adjustment of the door (6, 7) with respect to the body (4) to provide the desired visual alignment.

Regarding the assertion in the Advisory Action that the alleged modification allows for a wider tolerance range when aligning the furniture panel of the door with its surrounding environment, Appellant respectfully submits that the Advisory Action has not provided any

support to substantiate this conclusion or to explain how or why the vertical adjustment of the panel (7) with respect to the door (6) of the Lanzani reference is deficient in any way or somehow provides a lesser tolerance range.

For at least these reasons, Appellant submits that one of ordinary skill in the art clearly would not have been motivated to modify the Lanzani reference in view of the Mansfield reference.

In stark contrast, the claimed invention provides at least one shim removably inserted between the door and one of the supporting surfaces permitting the door to be adjusted in a vertical direction with respect to the body, as recited for example in claim 29.

As explained above, these features are important for providing a housing for a cabinet-like household appliance having multiple-articulation hinges that allow the user to vertically align the door position with respect to the body simply and without the risk of strain which wears down the multiple-articulation hinges. Other exemplary embodiments, as recited in the dependent claims, also allow the user to align the door position with respect to the body in a horizontal direction as well as in forward and backward directions with respect to the face of the door in a simple manner and without the risk of strain on the multiple-articulation hinges.

The Examiner's Answer dated June 17, 2010

The Response to Arguments of the Examiner's Answer dated June 17, 2010, asserts that the cost and additional parts are not a factor in determining patentability, and that one of ordinary skill in the art would see the advantages of having two means for adjustability and these advantages would be justification for the additional cost and parts.

Applicants respectfully submit that whether one of ordinary skill in the art would have had an apparent reason to combine the references in the manner alleged is relevant to determining the patentability of the claimed invention.

Furthermore, Applicants respectfully submit that the Examiner's Answer makes the conclusory statement that that one of ordinary skill in the art would see the advantages of

having two means for adjustability and these advantages would be justification for the additional cost and parts.

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." (In re Kahn, 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in KSR).

Appellant respectfully submits that such a conclusory statement is insufficient to provide a prima facie case for obviousness because the Office Action fails to provide an adequate rationale for combining the prior art as required by KSR International v. Teleflex Inc. 82 U.S.P.Q. 2d 1385 (2007).

Appellant respectfully submits that the Office Action has not articulated a reasonable basis for combining the teachings of the Lanzani reference and the Mansfeld reference to arrive at the claimed invention, except from using Appellant's invention as a template through hindsight reconstruction of Appellant's claims.

One of ordinary skill in the art who was concerned with the problems vertically adjusting the door panels of the Lanzani reference would not have had an apparent reason to refer to the Mansfeld reference since the alleged door assembly (6, 7) would already allow for vertical adjustment of the panel (7) with respect to the door (6) at the final destination. Hence, the additional modification of the Lanzani reference to add shims to provide adjustability of the vertical position of the door (6) would not only result in additional parts, and hence additional cost, but would be completely unnecessary since the alleged door assembly (6, 7) would already allow for vertical adjustment of the panel (7) with respect to the door (6). One of ordinary skill in the art clearly would not have been motivated to add to the cost and complexity of the assembly without providing any further benefits or solving any other problems from the existing design.

As explained above, the adjustment of the door with respect to the body is used in appliances in which the door is visible to the user simply to align the edge so that they are

flush with one another. However, these additional features still would not alleviate the need to adjust the furniture panel (7) with respect to the door (6). Hence, one of ordinary skill in the art would not have had an apparent reason to add an adjustment feature that correspondingly would add to the cost and complexity of the assembly while failing to provide any benefit, since the alleged door assembly (6, 7) would already allow for vertical adjustment of the door (6, 7) with respect to the body (4) to provide the desired visual alignment.

For at least reasons set forth above, the subject matter defined by independent claims 15, 29, and 35 is not rendered obvious from the alleged combination of the Lanzani reference and the Mansfeld reference.

Appellant respectfully requests reversal of these rejections.

- b. Claim 20 is NOT unpatentable under 35 U.S.C. 103(a) over the Lanzani reference and the Mansfeld reference, in view of the Richardson et al. reference (US 5,113,628).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Lanzani reference and the Mansfeld reference, in view of the Richardson et al. reference (US 5,113,628).

Appellant respectfully traverses this rejection.

The Richardson et al. reference does not remedy the deficiencies of the Lanzani reference and the Mansfeld reference with respect to independent claim 15, from which claim 20 depends. Indeed, the Richardson et al. reference is not relied upon for these features.

Moreover, the Richardson et al. reference has absolutely nothing to do with vertically adjusting the door with respect to the body, as claimed. Instead, the Richardson et al reference relates to a railless refrigerator door that does not require mechanical fasteners to hold the structure together.

For at least these reasons, none of the applied references discloses or suggests the subject matter defined by independent claim 15, from which claim 20 depends.

Appellant respectfully requests reversal of these rejections.

- c. Claims 37 and 38 are NOT unpatentable under 35 U.S.C. 103(a) over the Lanzani reference and the Mansfeld reference, in view of the Horgan, Jr. reference (US patent 3,555,733).

Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Lanzani reference and the Mansfeld reference, in view of the Horgan, Jr. reference (US patent 3,555,733).

Appellant respectfully traverses this rejection.

The Horgan, Jr. reference does not remedy the deficiencies of the Lanzani reference and the Mansfeld reference with respect to independent claim 35, from which claims 37 and 38 depend. Indeed, the Office Action explicitly acknowledges that the Horgan, Jr. reference discloses only horizontal adjustment using shims. Appellant submits that it would not have been obvious to modify the Lanzani reference and the Mansfeld reference in view of the teachings of horizontal adjustment using shims, as taught by the Horgan, Jr. reference.

For at least these reasons, none of the applied references discloses or suggests the subject matter defined by independent claim 35, from which claims 37 and 38 depend.

Appellant respectfully requests reversal of these rejections.

(8) CONCLUSION

In view of the foregoing discussion, Appellant respectfully requests reversal of the Examiner's rejections.

Respectfully submitted,

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CLAIMS APPENDIX

- 1-14. (Canceled)
15. (Rejected) A housing for a household appliance, comprising a body and at least one door, which is connected to the body in a manner that enables it to swivel due to the provision of at least one first and one second multiple-articulation hinge, wherein the door is supported on an upper supporting surface of the first multiple-articulation hinge and a lower supporting surface of the second multiple-articulation hinge by means of at least one shim inserted between the door and at least one of the supporting surfaces.
16. (Rejected) The housing according to claim 15, wherein a plurality of shims is inserted between the supporting surfaces and the door.
17. (Rejected) The housing according to claim 15, wherein the supporting surfaces are arranged on a support element which is disposed on a hinge arm of the first multiple-articulation hinge and second multiple-articulation hinge which is coupled to the door.

18. (Rejected) The housing according to claim 15, wherein the shims have a rectangular basic outline and are made of a plastic injection molding.
19. (Rejected) The housing according to claim 15, wherein a heat-insulating body of the door is arranged between the supporting surfaces of the multiple-articulation hinges and the multiple-articulation hinges are concealed behind edge sections of the door projecting over the body.
20. (Rejected) The housing according to claim 15, wherein an outer wall of the door is formed by a glass pane.
21. (Rejected) The housing according to claim 15, wherein the supporting surface is connected to the door by means of at least one screw on at least one of the multiple-articulation hinges.
22. (Rejected) The housing according to claim 21, wherein the screw extends through an oblong hole of the supporting surface.
23. (Rejected) The housing according to claim 22, wherein the oblong hole is aligned parallel to the door.

24-28. (Allowable)

29. (Rejected) A refrigerator comprising:
a housing including a body and a door;
first and second multiple-articulation hinges coupling the door to the body in a manner that enables the door to swivel, wherein the door is supported with an upper supporting surface of the first multiple-articulation hinge and a lower supporting surface of the second multiple-articulation hinge; and
at least one shim removably inserted between the door and one of the supporting surfaces permitting the door to be adjusted in a vertical direction with respect to the body.
30. (Rejected) The refrigerator according to claim 29, further comprising a plurality of shims removably inserted between the supporting surfaces and the door, the position of the door with respect to the body being adjustable in a vertical direction in response to the number of shims disposed between the supporting surfaces and the door.
31. (Rejected) The refrigerator according to claim 29, further comprising a mounting bracket coupled between the first multiple-articulation hinge and the door and permitting the door to be adjusted in a horizontal direction with respect to the body.

32-33. (Allowable)

34. (Rejected) The housing according to claim 15, wherein the at least one shim inserted between the door and the at least one of the supporting surfaces causes the door to be adjusted in a vertical direction with respect to the body.

35. (Rejected) A housing for a household appliance, comprising:

a body;

at least one door coupled to the body in a manner that enables the at least one door to swivel with respect to the body, the at least one door being vertically adjustable with respect to the body;

at least one first multiple-articulation hinge, wherein a lower end of the door is supported on an upper supporting surface of the first multiple-articulation hinge;

at least one second multiple-articulation hinge, wherein an upper end of the door is supported by a lower supporting surface of the second multiple-articulation hinge; and

at least one shim between the lower end of the door and the upper supporting surface of the first multiple-articulation hinge, and the upper end of the door and the lower supporting surface of the second multiple-articulation hinge, the at least one shim vertically adjusting a position of the door with respect to the body.

36. (Rejected) The housing according to claim 35, wherein the at least one shim includes a plurality of shims,

wherein at least one first shim of the plurality of shims is between the lower end of the door and the upper supporting surface of the first multiple-articulation hinge, and

wherein at least one second shim of the plurality of shims is between the upper end of the door and the lower supporting surface of the second multiple-articulation hinge.

37. (Rejected) The housing according to claim 36, wherein the plurality of shims includes a predetermined total number of shims between the lower end of the door and the upper supporting surface of the first multiple-articulation hinge, and the upper end of the door and the lower supporting surface of the second multiple-articulation hinge.

38. (Rejected) The housing according to claim 37, wherein a number of the at least one first shim of the plurality of shims is different than a number of the at least one second shim of the plurality of shims.

EVIDENCE APPENDIX

None

RELATED APPEALS APPENDIX

None